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2	NUCLEAR REGULATORY COMMISSION	
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7	U.S. NRC	
8	11555 Rockville Pike	
9	Rockville, MD	
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11	Tuesday, November 2, 1999	
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14	The above-entitled meeting commenced, pursuant to	
15	notice, at 9:05 a.m.	
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you providing that to us. I believe we have individuals

available to respond to those topics. If not, certainly, we will take away any IOUs. We'll review those at the end of the meeting and make sure that we provide those not only to the individuals present today, but, also, for the record.

These meetings, I think, are very beneficial for us. They are a kind of unique forum and they're certainly not unique to Westinghouse. We, also, meet with GE and CE and B&W. But, they do have the opportunity, I believe, to focus the staff not only on where the industry is coming from as an entity with some commonality of vendor types, but, also, provide feedback to us on how the staff is doing in performing in those areas.

An important aspect of this is the look-forward aspect of what's coming in the future that we need to be able to anticipate, as far as staff resources, our concern, and schedules. I think we have some lessons learned in those areas. As a learning organization, NRR will take those from our stakeholders and provide for lessons learned and move forward.

As an organization, we are focusing in three arenas right now organizationally. We're focusing on our planning and budgeting process, which we hold ourselves accountable not only for the products, but for the effort for those products, and I think this couple of topic items speaks to that today in measuring those deliverables. And we've talked about those in terms of topical reports in the past or licensing amendments or other product lines.

We're getting a little more sophisticated in there. Our operating plan is out in draft form. After the

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A N R: Li first quarter of this year, we'll be populating that operating plan with the measurables for the first year -- first quarter of this year, rather, and that will become the pilot for the agency. We'll transfer that operating plan knowledge to the other aspects of the agency and throughout the remainder of this year, with the goal of the first part of fiscal year 2001, for each aspect of the NRC to have an operating plan using the NRR operating plan as a template.

That's important, because, in order for us to perform our job in NRR, we have other stakeholders, and our operating plan and our performance plan cuts across organizational lines. Decommissioning will be an example of that. The program lead for decommissioning is with John Greeves in NMSS. Stu has the lead NRR, as far as the Part 50 licenses are concerned. But, we're operating more in arenas now; so in that decommissioning arena, it's incumbent on Stu and Stu's staff to coordinate with the -- ultimately with the arena manager, who is John Greeves, to be sure that the agency is cohesive and understandable in that area.

How does that affect yourselves? Well, when we start talking about what it takes to get work done, we essentially plan our product lines and then we measure those, and we want all of our stakeholders to be involved in that. And the earlier we can plan and the more we agree on what the measurables are and what the agreement of success is, then the better off we are, as an organization.

The second area we're operating in right now is internal and that is organizational and individual effectiveness. And we operate essentially with a

four-by-four matrix that shows various levels of performance and various areas that we measure. One of the key focuses we have right now, which you may find interesting, if not amusing, is that we -- our work planning center. Quite a few of our resources right now are focused on the startup of a work planning center, where we have gone back and mapped out our processes, identified those product lines, mapped out the variables, what we need for procedures, and we're going through those processes.

That will include topical report reviews, amendment reviews, coordinating with research, who is another one of our stakeholders, as necessary for us to get our work done on confirmatory research. It's going to include a corrective action program, for example, which I know the industry is very interested in the NRC's view towards an internal corrective action program. And we're looking right now on whether it should include an employee concerns program. So, that's a little bit of a vision, but the flavor is that we're looking for our organization to become much more accountable and much more disciplined in how and when we do our work and to be responsive to those external influences.

The third area that I mentioned just briefly is a leadership model and people like Brian is an associate director. John Johnson, who is coming in to replace Bill Kane, will be key in defining this leadership model that we have and moving it forward. And we have Arthur Andersen helping us in that arena.

Organizationally, we're continuing to refine the

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organization. As I mentioned, Bill Kane has gone over to take over the nuclear materials area. John Johnson, who is the Deputy Regional Administrator from Region II, will be coming in to take over Bill's slot, as the Associate Director for Inspection and Programs. That's a key area for us, as far as liaison with the regions is concerned.

John has worked in Region I and Region II. He's an Annapolis graduate. He has a graduate degree in nuclear engineering from UVA. He has his Navy nuclear experience, but he's, also, been a senior resident inspector. He was at Pilgrim, for example, senior resident. He's worked in the DRS organization in the regions, in the engineering and the DRP and was Deputy Region Administrator. So, he brings those attributes in to the product lines that deal with the oversight process, definition of the security program, operating licensing, 50.59 maintenance rule -- all of those activities of that response in that review, all those areas that are underneath the Associate Director for Inspection and Programs.

We're, also, continuing to look at license renewal. I know that's a topic area, as far as today. You know we have five units in there. For example, we have 80 some odd percent of the industry who has expressed some type of interest in license renewal. We view, as we map this out in the future, that we may have upwards of 12 units at any time in the pipeline going through license renewal. So, we have a challenge, which is really an industrial engineering challenge for us, to break up this process into different product lines and be able to coordinate those, so we can

N R L keep the process moving in the future.

Our budget right now calls for four units to come in this year, four units to come in next year. We should complete Calvert Cliff's and Oconee this year. That's our goal. So, I think as far as looking for attentions in our organization for where our resources are going in the future, there's two main influences. One is we're not seeing the amount of plants, perhaps, that we had budgeted or anticipated in decommissioning. What's the reason for that? Well, deregulation and these plants being looked at favorably for being purchased. Oyster Creek is a good example of that and Oyster Creek was on our radar screen potentially as a plant for decommissioning. Now, it's on our radar screen as a plant potentially for license renewal.

The resources are very different. The resources in decommissioning are two to three resources, perhaps, for the first year, which is similar to an operating unit; but, then, it tails off. Resources for license renewal are about 22 FTE and a good number of hundreds of thousands of dollars. It's a way of getting them refined in those areas. But, clearly, we have product shifts and those product shifts will drive our resources and we'll have to sustain communication with you folks to be sure that that's clear in where we are with expectations.

Now, we have the new Chairman. Dr. Meserve -Cameron Meserve was officially on board last week. He's
already very involved in the staff product lines. We're
briefing him on decommissioning. We're briefing him on the
maintenance rule. I noticed over the weekend, he's signing

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operator licenses already. So, he's engaged. And we're in the transition now with his staff. He has a temporary staff for 90 to 120 days during the transition; then there will be a number of individuals who are selected for permanent staff members. That's always a little bit of an unknown for us, because, clearly, the Chairman deserves and seeks key members of the staff to help his staff. So, we'll roll with that for the next 90 to 120 days and then solidify that staff and then refine the organization.

That's a little bit of a capsule. We have a number of deliverables, I think, that we're going to talk about today for yourselves; but, I'm sure those that are on your radar screen, as far as 50.59 and maintenance rule and those types of products that are being applied.

A big milestone for us will be the oversight process at the end of this year, rolling that out for the remainder of the plants. We have meetings coming up with INPO this week and NEI next week, annual meetings. And the Commission, typically, reserves this part of the year and the first part of next year to focus on areas that the Commission believes is important on the staff's schedule.

So, I would ask you to follow the tasking memo -Chairman's tasking memo. We put out that periodically. We
have the report we send down to Congress. That's addressed
to Senator Domenici and other stakeholders. Those focus on
key areas. And then, we, also, have the reactor water -- or
reactor -- regulatory information conference. The reactor
water safety conference was last week. The regulatory
information conference is coming up and we'll be looking for

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input into the agenda. We should be having that up on the Web very soon, soliciting agenda topics. We'll be looking for industry and certainly the Owners Group participation to help define those products. And we hope to have, as we're gravitating towards each year, a much more interactive session, where we have less presentations, if you will, and more discussions on topics. And in order to do that effectively, we need to have key stakeholders involved in that, not only the industry, but -- industry groups, but certainly generators, as well as other stakeholders. So, we'll be soliciting that.

So, with that, you know, we can go into the meeting. Jack, I think, you're going to lead us in that.

But, are there any specific topics, Larry, that you or Lou want to bring up before we start?

MR. WALSH: No.

MR. SAM COLLINS: Lou is going to have ample opportunity to talk here. Steve, did you -- Steve?

MR. BLOOM: Back up to them and let them start the meeting. All right.

MR. BAILEY: Jack Bailey speaking now. First of all, I echo your comments on the importance of this meeting from our perspective. We've been doing this now for seven years. But, the WOG, itself, has changed fairly significantly over that amount of time, in some respects, particularly the last two years. And for example, about two years ago, we told you we tried to go through a strategic planning process with the WOG in a previous meeting and align some of what it's doing with what the industry changes

are requiring it to do, and one of the big things we had done about a year ago is establish an executive management group that works more closely with the steering committee of the WOG.

In past years, the steering committee, and even currently today, pretty much drives the day-to-day operations of the WOG, but they look for valuable input, in terms of what they need to be looking forward to in the future, for both its members and to interact with the regulator. The executive management helps them do that; but, I think this meeting and this forum is another valuable input from our perspective. We do it twice a year and even though we have a lot of ideas on how we might drive forward some of the issues we're dealing with, often the input we get in this meeting helps set that direction for us. So, I put it on the table, as we start the meeting, because we need those kind of comments and that kind of insight sometimes from your perspective, too, just as you need it from ours, from what we're doing.

The executive management group is a small subset of the overall executive advisory committee and we take that input and talk about it, in terms of giving direction to the steering committee, too, to help them determine what they need to do. We try to pick items of importance that are on the agenda; but, if there are other things on your list, too, that you think need to be talked about, then feel free to bring those up at any time during the meeting.

Lou is going to take the lead on doing the presentation and if we need other people to contribute,

N R: Ll also, at some point, we'll just challenge them to come on in and add to it. So, let's get to it.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: Good morning, Lou Liberatori.

MR. SAM COLLINS: Put that on your tie.

[Laughter.]

MR. LIBERATORI: Good morning. I'm Lou
Liberatori, Chairman of the Westinghouse Owners Group. I'd
like to open by quickly going through our proposed agenda
for this morning and briefly go over the organizational
structure of the WOG, which hasn't changed very much since
the last time we met. But, basically, Jack has already made
an introduction.

This is the agenda. We've selected the following items for presentation this morning: where we are with respect for our program to redefine a large break LOCA; to talk a little bit about containment sump issues; where we are in the baffle barrel bolting program; the GSI-23 closure; where we're headed with respect to license renewal; I'd like to talk a little bit about a NUPIC audit we had at Westinghouse, which was sort of our follow-up to some of the issues that came out of your audit with the Siemens analysis last time; and talk a little bit about some of the requests that you've asked us to do, with respect to reviewing draft reports that become available to you. We'll go through our normal listing of where we think we are in the WOG topicals that have been submitted, as well as what we anticipate over the next year, year-and-a-half. And I'm going to have some open discussion and closure of the meeting.

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So, as far as availability, is there any order?

Does anyone have to leave? We can be flexible of how we present these. Otherwise, I propose we just go down the list.

MR. SAM COLLINS: I think we are prepared of the order suggested, right?

MR. BLOOM: Yes, sir.

MR. LIBERATORI: This is what WOG steering committee structure. It's basically been this way for a number of years now. We have a chairman, a vice chairman, an RRG chairman, who are all here in attendance today. The basic structure has five subcommittees, along with a couple of special working groups that deal with the baffle barrel bolting and license renewal, both of which, at the current time, report directly to the steering committee, rather than the subcommittee. And I'll be talking a little bit about that later on, when we get to the presentation on those matters.

We do have our annual elections in February. So the next time we come in here, there will be a significant number of changes on this chart.

MR. SAM COLLINS: Are you running?

MR. LIBERATORI: I'll be stepping down. And so, there will be elections for a lot of these positions, and four of the five subcommittee chairmen will, also, be changing this time around. So --

MR. SAM COLLINS: How does that work? Will you -- I mean, I don't want to express as term limits, but, I mean, is there a motivation to keep people moving through or is it

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A N R: MR. LIBERATORI: We have annual elections, but the expectation is that everyone serves a two-year term. And there have been three-year terms, primarily due to either a vice chairman not being able to take over or a slot being open and so forth. So, we tend to fill in as we need to. But, typically, it's a two-year term.

MR. BAILEY: Jack Bailey. The real motivation is these folks put in 50 to 60 percent of the time, probably, just in WOG activities. So, any utility that sacrifices a valuable resource like that, they kind of want them back, at some point. So, it's a matter of sharing the load between the utilities.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: The next slide I have contains basically the open items from our April meeting. I just wanted to touch briefly on them and how we close them or at least addressing them.

The first one was a top nozzle, which was a fast breaking issue, at the time we met in April, and the Westinghouse fuels people did come in here in May and have a meeting on that issue. And as far as the WOG is concerned, we have -- as a WOG, we have no active program with respect to the nozzle screw issue. Westinghouse is handling that as a fuel issue directly with the fuel people at the utilities. We do have our fuel working group chairman following the issue, working with Westinghouse, so that we do have an avenue for information. But, at this point, it appears to be handled within the fuel division of Westinghouse. We see

no need for the WOG to interject itself. And people are preparing, as they get into the fall outages, in the event that something occurs, so they are continuously planning this in place at the utilities.

The status of redefinition of the large break LOCA, I have separate slides on that. I'll be covering that. When we met back in April, we were still looking for some lead plants to step up as reference plants. Comanche Peak and D.C. Cook were the Westinghouse plants that have since stepped up. This gives us both an ice condenser, as well as a large dry, so we feel that they were good choices and they should help the overall program.

MR. SAM COLLINS: That is commendable of D.C. Cook
-- they have a lot on their plate right now -- to do that.

SPEAKER: Thanks a lot.

MR. LIBERATORI: PASS elimination, I don't have any slides to cover this today, but it was becoming active when we met in April. There's been a lot of activity over the last six months on that. So, we have been working with staff and we've made presentations at ACRS. So that program is moving along and, at this point, we're ultimately satisfied. We've gotten one SER on the core damage assessment and hopefully won't be much longer before the second one is out.

MR. SAM COLLINS: You're following the ACRS --

MR. LIBERATORI: Yes.

MR. SAM COLLINS: -- committee comments on that?

MR. LIBERATORI: Yes.

MR. SHERON: Now, your proposal was not to

1 eliminate PASS completely, if I remember. 2 MR. LIBERATORI: To maintain some capability for 3 sampling. 4 MR. SHERON: Which is different from the --5 MR. LIBERATORI: Which is different from 6 combustion and we're working to resolve this. 7 MR. SHERON: Okay, and you know we went out with a 8 Federal Register notice, looking for comment -- or, at 9 least, I think it's somewhere in the printouts -- it's in 10 the process of going out to basically solicit stakeholder 11 comment on the elimination of PASS, primarily from the 12 states. 13 MR. LIBERATORI: In the emergency planning 14 perspective. 15 MR. SHERON: Right. 16 MR. LIBERATORI: So, we're active and we're 17 following that. 18 We've discussed the effort we had ongoing to do 19 PSA certification among our members and you had suggested 20 that we get in touch with ASME. We did that; not only did 21 we do that, we actually have a WOG representative on the 22 project team now. He's involved in some of the standard 23 writing. So, we're intimately involved in that effort now. 24 MR. SAM COLLINS: How much of a separate effort 25 are you driving right now, Lou, as opposed to the ASME committee? I mean, are you working in parallel with them now or --Ν MR. LIBERATORI: Yes, we're working parallel. We've had an effort to, over the period of about three years

or so, to do all of our members PSAs. We've completed -correct me if I'm wrong, I think we've done three so far.

And we're continuing the process, maybe at a little bit of a
slower pace, but we feel it is helping in parallel, because
we're -- as we're doing that, we're learning and are able to
bring that to the --

MR. SAM COLLINS: Okay.

MR. LIBERATORI: -- project team, as well. So, we're factoring in some lessons learned, as we go. So, at this point, we think we're okay. We're just not going as fast as we had planned on our original project.

MR. SAM COLLINS: Right; okay. Thank you.

MR. LIBERATORI: As far as the AOV guidance document, the joint Owners Group had been working on that collectively. One document was prepared and finalized. And the JOG and our executive committees decided to forward that to NEI for disposition, with respect to the industry. NEI looked at it and their selection was to forward it to INPO, who subsequently issued it in the information exchange and then, also, forwarded a copy to staff. We know that very recently some comments were provided back to NEI by the staff on that document and at this point, those comments will be sent back to the joint core team, when they do meet. I believe they're not scheduled to meet until after the first of the year. But, at this point, they will be fed back into that group for consideration.

MR. SAM COLLINS: I think we got wrapped around the axle a little bit on that with the comments. But, I think it's straightened out now.

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A N R: MR. BAILEY: That was the part about INPO being -MR. SAM COLLINS: Exactly. Yeah, we need to be
careful that INPO and NEI are able to maintain their roles
and they're clearly very distinct roles, as opposed to NRC
with their regulatory stand. I mean, we're trying to -Brian is working on this and it's not an easy issue, about
how to coordinate those three arenas, between NEI, INPO, and
NRC, to try not to be redundant or, in some cases, even
diverse in a way we approach some of these problems.

MR. WALSH: If you get a solution, let us know.

MR. SAM COLLINS: We're going to talk about it on

MR. LIBERATORI: But, it's a problem on our end, too. The Owners Groups are moving into an area, where we seem to be working more and more on joint topics and, you know, this is a classic example of that. So, we meant this as an acceptable way of addressing an AOV program, if the utility felt it was in trouble and needed some help. And that's why it came out as an information exchange item from INPO.

MR. SAM COLLINS: This is an area that we might want to just remain sensitive to, because in our trying to resolve the issue, Larry, about how to handle these generator communications or how to broker and take credit for industry initiatives, the Owners Groups may have a role in that. You know, as we continue down this path, we may very well need to call other people to the table and try to understand better how to do that effectively and efficiently.

MR. LIBERATORI: And we would be open, as well.

As I said, the efforts are -- our cooperation with each other of involvement, as well.

 $$\operatorname{MR}.$$ SAM COLLINS: I'm going to more actively meet with INPO on Thursdays.

MR. LIBERATORI: The next item has to do with the break opening time WCAP. The staff did issue an SCR, but limited its application to strictly the baffle bolting issue and our original request had been for a general approval of that. And we resubmitted a request clarifying that. When we met last time, we weren't quite sure, you know, where that ended up. We have cleared that up in the meantime. Andy, I believe, through Steve, has made some contacts. And you do have the re-requested letter and we can talk about it later. It's on the table of WCAP and is still outstanding.

MR. SAM COLLINS: We're going to come back to that today, Lou?

MR. LIBERATORI: Yeah.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: It's just that we didn't have an answer when we met last time.

MR. BAILEY: Since we're not going to cover AOV as part of the agenda, I think we need to go back and just put something on the table, as part of this discussion. The direction the industry is going right now is one where we will have a program guidance that's out there, right now issued through INPO as a guidance document. But, there is not a move right now underfoot to have an industry commitment to a program similar to like the steam generator

program, for example, where NEI signed off on it.

So, in that respect, it will be a guidance available to the industry to put a program in effect, but there will be no requirement, at this point, for them to have to follow that, unless they have a problem with AOVs and they deal with it. So, I don't know if that creates a problem for you, but I just wanted to make sure that was clear, that that's where they think they're going -- or where the industry thinks it's going right now.

MR. SHERON: I don't know -- he just went to seek to get engineering here.

MR. SAM COLLINS: Okay.

MR. SHERON: We may want to come back to that. I'm trying to get our engineering folks here.

MR. LIBERATORI: At the last meeting, we talked a lot about reactor coolant pump seals and that the closure for GSI-23 was going to become very active, which it did. And we participated in a number of meetings since last April. We, also, made a presentation at ACRS just on October 1st. I do have a slide on that later; but, clearly, we've engaged with respect to the closure of that issue.

And the last item here was whether or not we, as a WOG, were going to comment on the proposed changes to 50.55a, specifically with respect to elimination of the 10-year update. And as a WOG, we determined not to comment, strictly based on the diverse opinions within the Owners Group; it was difficult to come to one consensus. However, we did encourage our members, from their own perspectives, to provide comments either directly or through NEI.

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MR. SHERON: Do you have diverse perspectives on that issue?

MR. LIBERATORI: Yeah.

MR. SHERON: I mean, I remember when the industry comments came in and I think they were all like rubber-stamp letters. I'm just -- I was curious why you have diverse comments. But, that's okay; you don't have to get into it.

MR. SAM COLLINS: Lou, are you following ACRS comments under closure or GSI-23? Are you familiar with --

MR. LIBERATORI: Yes, we have -- in fact, Dave was the one who made a presentation at ACRS and he's been close

MR. SAM COLLINS: Okay. So, you have seen the questions potential of how many plants have the upgraded seals. Is there -- is it appropriate for the staff to do a study, you know, to determine potential or should we look at other seals and those types of things?

MR. LOUNSBURY: Dave Lounsbury. My personal opinion on that is it's a misconception with the high temperature old rings. They're definitely improved; they're definitely better; however, the old rings are still functioning. And all the plants that have been out there are moving to SPO criteria, that they're currently licensed to, have had to prove that the old style old rings were still adequate through safety especially applied to the coking. But, there was the slight misconception that with the ACRS, in my opinion, that they have this new and latest and greatest, you know, design, why isn't everybody jumping on it. But, when you look at the cost of putting that in

and the ALARA consideration and all these other things, if what you have is adequate, why incur the extra cost.

MR. LIBERATORI: A number of people had them in stock that they were using and other people, as they were doing normal RCP maintenance, are phasing over to the new high temperature old rings. There are some utilities that have high temperature old rings on sump pumps and not on others, so they're handling them in the normal scheduling of maintenance, as opposed to a speeded up back fitter sorts.

MR. SAM COLLINS: Okay; thank you.

MR. LIBERATORI: Redefinition of large break LOCA design basis: back in September, 1998, Commissioner Diaz requested all of the Owners Group to identify their highest priority regulatory issue, and the one we selected at that time was to open a consideration for eliminating the current large break LOCA requirements. Collectively as an Owners Group, we had seen a lot of effort, both in time and money, going toward issues that directly related to or were primarily driven by large break LOCA considerations and given the risk informed world we were moving into, it seemed like the time was ripe to reconsider that. So, that's what we had proposed.

We went back to our members. In February '99, we initiated a program basically to evaluate such. And it really had four components: one was to review the regulations, identify regulatory impact; the second was to determine what the licensing approach would be for that, because, obviously it would involve some proposed rule changes; define a technical approach; and then, also, at the

1 appropriate time, obtain industry involvement on this, 2 because it couldn't just be a Westinghouse Owners Group 3 effort. So, this was basically phase one of our program, 4 which is really still ongoing. 5 This slide shows the licensing evaluation we did. 6 Basically, there are three specific areas in the Regs: 7 50.46, as well as Appendix A and a number of the GDCs and 8 Appendix A, that all specifically define the large break 9 LOCA, as up to and including the double-ended rupture. So, 10 these were the areas that we knew required attention on our 11 part. 12 MR. SHERON: What exactly were you proposing on 13 this? 14 MR. LIBERATORI: We haven't yet. 15 MR. SHERON: Oh, okay; I'm sorry. 16 MR. SAM COLLINS: The approach, though, is change 17 the rulemaking. 18 MR. LIBERATORI: Yes. 19 MR. SAM COLLINS: The approach is rulemaking. 20 MR. LIBERATORI: The approach is rulemaking. 21 MR. SHERON: I'm sorry, I was going to say that, 22 you know, this maybe considered as part of the option three. 23 MR. LIBERATORI: Yeah. 24 MR. SHERON: Okay; I'm sorry. 25 MR. LIBERATORI: Yeah. Basically, we've been working for most of this year in a rather deliberate way to identify what changes were needed; what would be the technical background for it; how would the utility members use it; is there a cost benefit; what are the upsides; what

are the downsides and so forth.

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And I've categorized a number of the benefits here: one is it would allow you to focus the resources on more risk significant or more likely events, as opposed to the large break LOCA; it's to achieve consistency within the application of the LOCA requirements, particularly with respect to the regulations, themselves; reduce regulatory burden associated with large break LOCA. There are a number of tech spec improvements that could come out of this, both with respect to definitions of what operability really is and what functionality is and LCOs, and a number of those things could evolve from this. And, also, peaking factor increases could lead to additional flexibility in core design. What we really found here is -- there are 23 members in the Owners Group and everybody has a different number one way they would use this. It's one of those things where it's not one or two really big hitters, but everybody could use this in a different way, depending on their plant specific situation.

MR. SHERON: What is the biggest area of benefit?

Is this -- I mean, you mentioned a couple there. Is this basically in stuff like ease of generator start time?

MR. LIBERATORI: That is one of the lead ones.

MR. SHERON: Okay.

MR. LIBERATORI: It could be operability -- it could be -- I might be able to leave an accumulator out of service.

MR. WALSH: A few points would be an upgrade would almost be automatic.

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MR. SHERON: Yeah. Well, Westinghouse plants, I think, they only mention local entity. So, obviously --

MR. LIBERATORI: Right. And you still would have your other -- you know, you would still have DNB and steam reduce, so other limits that would restrict where you could go with this. But, it does give you a little bit more flexibility to work with. These are some of the general categories. But, again, there are pages of different ways people could see themselves using this. And then one of the reasons being fairly deliberate on this is to make sure the effort is focused and we can identify a few things that everybody can get behind.

We did last month meet with the other Owners
Groups, together with NEI, and EPRI was at the meeting, as
well. We presented, you know, where we had gone with this;
you know, that we had broken the ground and got the ball
rolling. Basically, the industry is supportive of this. It
appears where we might be headed, and I can't say that for
sure yet, because we're still working out the details, but
it appears we might be forming a task force under the NEI
risk informed Part 50 working group. That would, then,
become the focus with the industry effort on this. So, the
Owners Groups would still be engaged. It would still be our
work. At least, we would be focused, you know, through this
NEI task force.

MR. SHERON: Are you just focusing strictly on break opening time or are you looking at a broader --

MR. LIBERATORI: Broader than just break opening time.

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MR. SHERON: Okay. But, in terms -- I'm just thinking out loud here. In terms of what the ultimate benefit -- in other words, you could only go so far, okay, and then you're going to run into upper limits, okay. And you get some increase in, say, peaking factor, you know, kilowatts per foot and stuff; but, at some point, you run into a limit like on transients and the like, in which case any further relaxation of LOCA requirements isn't really going to be much of a benefit.

What I'm sort of driving at is, there's been some other options kicked around here, okay. One is, for example, just redefining the decay heat curve that's used, instead of the 1971 ANS plus 20 percent, with 79 plus two to sigma set, all right. Baker Just get -- you know, instead of Baker Just, use Cath Carpel from metal water reaction.

I'm just curious, because those are -- you know, in terms of the actual rulemaking, okay, some things, I think, can be done a lot easier than, you know, a more comprehensive major overall, because, I mean, obviously, the LOCA provides the design basis for the containment, okay. And if you eliminate -- okay, and there's a lot of margin that we take credit for in severe accidents from the containment. The fact that, you know, these containments hold 50-60 pounds of pressure, but that's the ASME limit.

When you look at their ultimate strength, it's, you know, three times -- two-and-a-half times as much, and you get a lot of benefit and risk base from that. And so, we always ask the question, is that if we start backing off, are we losing a lot of that margin we had in severe accident

N R L space, because, now, you know, if you don't have the break opening, maybe you don't get the mass energy release and, therefore, you know, somebody says, gee, you know, our containment pressure doesn't have to be as high anymore; it's only 25 pounds instead of 50.

MR. LIBERATORI: That would affect the ultimate strength capability of containment --

MR. SHERON: Of existing containments. But the question is: what do you do about a new plant, then? Okay, if they go and design the plant to these new revised rules, are they going to come in and say I don't need a containment, it only holds 20 pounds. I mean, you know --

MR. WALSH: The area that we started looking at and we're not finished yet, steam line break is just as much pressure as the LOCA.

MR. SHERON: Yeah.

MR. WALSH: So, unless we can come up with a monitoring system for the steam line break, which would be very difficult, that's going to be a little bit more of a --

MR. SHERON: The only reason I'm saying this is that, you know, from a standpoint of getting some benefits, okay, based on improved knowledge, rulemakings that don't have huge sweeping changes to them, okay, sometimes are easier to push through. And in terms of whatever the perceived benefit is, you know, there may be some -- you know, some relief that you could get that basically gets you where you're not LOCA limited anymore. You might want to think about it, that's all.

MR. LIBERATORI: Understood. And as I said, we're

spending a lot of time on decisional analysis and framing that, so that we can identify what the benefits are. And I guess what we were proposing here is we think, as an industry, we'd be ready to meet with staff in the first quarter roughly and exchange exactly that kind of dialogue, which obviously has to be a two-way discussion, and where maybe you see it fitting in over here, as well, from your perspective. But, clearly, we would intend to have a 1.174 analysis. We'd be looking at extrapolating before break to the analytical arena, where we can't go right now, and where we think we'd be going, in terms of what would be the design basis ECCS analyses, if you will. So, you know, all of these are on our table and we're dealing with those right now. So, you know, we, again, think we'd be prepared to meet with you in the first quarter.

MR. SHERON: Okay.

MR. SAM COLLINS: Yeah, I think we want to keep our options open. Part 50, option three is a vehicle. It's a study right now.

MR. WALSH: That's got some concern with us, that we're behind their areas --

MR. SAM COLLINS: Right, and to the extent whether that study ever comes to fruition and how much of it is -- becomes practical to apply and what format it's done, and then whether the industry is asked to take advantage of all of Part 50 or parts of Part 50, I think is just knowledge we have to put on the table. And the reason is, I think, our stakeholders, who are interested in improving the regulations by whatever means, need to understand all the

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A N R: options. Whether it's a petition for rulemaking or whether it's option two or option three, the expectations have to be clear. Obviously, you're putting a lot of work and resources into this. So, we need to be able to lay out for you what the variances are between these three success paths, and that should be a topic at a meeting that we have, so that we aim this in the right direction and understand what the backside of these processes are.

MR. BAILEY: And we agree with you. This is probably the most complex of the issues we're dealing with right now. It started off as an Owners Group initiative a year ago -- or two years ago, almost; but, then, I think, superseded, in some cases, by some of the things that have started to develop within the industry, within the NEI working group. And we saw that at one of our strategic planning meetings and we told them to integrate it with the NEI activities. But, even then, I think it's going to take a considerable amount of dialogue between the industry and the NRC to figure out which path to go down here.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: Well, we're giving this great attention. Larry, who is Vice Chairman of the overall WOG, is really heading up the team that's working on this. So, you know, we're giving it our highest attention, at this point.

The next topic is containment sump issues. The WOG has been actively participating with the staff. We've been involved in the public meetings. We've had representatives out at the University of Mexico meetings not

too long ago. The general consensus of the feedback we've gotten is that the program is well developed and many of the comments have been incorporated. We do still have some limited concerns, which we have forwarded to the staff, primarily in those areas where we're trying to extrapolate engineering judgment. And I didn't plan to go into those in detail here, but they have been forwarded to the appropriate members of the staff.

MR. SAM COLLINS: Are you communicating effectively on those?

MR. JACOBS: Karl Jacobs. Communication, both with the staff members and the plants, have been very, very good.

MR. SAM COLLINS: Good. It's good feedback.

MR. LIBERATORI: So, we've been participating on the PIRT panels, both of them. We've -- as I mentioned earlier, we did -- we were able to get two volunteers to step up to be representative of the plants. We continue to urge our members to provide what they need to provide to NEI, with respect to the survey responses. Two items we did want to have a little bit of discussion on: one was the risk-informed approach. It was our understanding that you were going ahead with risk informing the approach, as well as guidance to this issue. We really haven't heard anything on that.

We had made an offer to view inputs to that analysis. That offer still stands. We're just not sure where that stands in your overall progress on this effort. But, we're looking for maybe where this stands, as well as

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about a year ago and, at that time, the staff said they
weren't prepared to endorse the Owners Group interpretation;
however, you wanted to do more evaluation before you decided
on whether leak before break could be applied to debris
generation aspect of the issue.

And, again, one of the reasons we bring this up is

where the application of GDC-4 and leak before break stands

with respect to this particular issue. We had a meeting

And, again, one of the reasons we bring this up is that we don't see anything in the planning right now dealing with the debris generation aspect of it. It's been focused mostly on the transportation of plugging. So, we're wondering if you had gotten to the point where, you know, you knew where you were headed on that or not yet.

MR. SAM COLLINS: Tim, Rob, you want to --

MR. ELLIOTT: Rob Elliott. As far as regeneration goes, our current plan right now is to scale the BWR data out there for analysis purposes. We have tried -- we've had discussions with the Owners Group to talk about their test program, about whether or not they could address the issues, as far as debris generation goes, and I don't believe we've had any final discussion on that. I know that, Carl, you guys were going to go back and talk over what you wanted to do in the way of testing and we haven't yet met again to find out what was concluded in those discussions.

Let's see, what was the second question?

MR. LIBERATORI: It was the risk-informed approach and the GDC-4 approach.

 $$\operatorname{MR}.$$ ELLIOTT: Basically, with the GDC-4 approach, I think what we have is two different interpretations of

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what was approved by the staff originally for GDC-4. And we -- I thought we had said this in the letter to you all that we believed that it would require a rule change to apply leak before break to issues that are related to ECCS design, because the statement of consideration for GDC-4 clearly says that containment functional design and ECCS functional design shall retain their current nonmechanistic requirements for doubling the breaks.

So, I thought we had addressed that question; but, what we were, also, going to do, as part of our research program, was to evaluate what the impact on ECCS design, as far as what would be the differences between a double-ended break and a leak, in which debris would be generated by a worse case leak and whether or not that could potentially cause a failure of ECCS. So, we've been proceeding with our research program, with the intention of addressing both aspects of the pipe break and seeing what the impacts are.

As far as the risk approach goes, the way we've been treating risk is mostly from an issue of conditional failure probability. Now, we're nowhere -- the reason why we haven't shared any information with you is we're a long way away from being able to do the risk analysis, because there's a lot of information that we want to gather relative to transport and head loss and debris types and that sort of thing. But, we were looking at it from the perspective of how likely, given a LOCA, were you likely to fail the sump.

And that's essentially the way the analysis is that is set to proceed right now. We weren't -- basically, we were looking at it as risk analysis would help us to make

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A N R: Li a judgment of whether or not any kind of act that would be needed, based on, you know, it is not very likely; where there's other mechanisms, it is more likely to fail the ECCS than clogging them, you know. Obviously, you know, it will probably be a priority issue. If it's highly likely to fail, you know, we're going to need -- we'd have more concerns that we would want to address to the industry.

That's, basically, how we've been proceeding. And we've been having discussions with the three Owners Groups and I know that there is still a little bit of confusion.

We've been trying to work on explaining it, in more detail.

And I thought we had -- we did get some comments on the test program, but I didn't know if there were still comments that we needed to address on --

 $$\operatorname{MR}.\ JACOBS:\ We've\ sent\ you\ some\ more\ comments.$ This was to Michael.

MR. ELLIOTT: Okay.

MR. JACOBS: One of them did address the risk-informed area; one addressed engineering judgment. We -- it back into the plume and how the plume will do that; how to get the debris off the floor; how the plume cannot really -- can't do that, you have to use engineering judgment to that issue. Those are one of the main items that we're looking at and how you guys can address that area. Our concern with engineering judgment brings too much conservatism into the analysis. So, those are the major issues that we have.

 $$\operatorname{MR}.$ ELLIOTT: Well, I would say, I haven't seen the letter yet, so --

MR. JACOBS: It's with Research.

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MR. ELLIOTT: Okay. I'll check into that. We have another meeting shortly coming up.

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MR. JACOBS: You're being forwarded a copy. You were left off by accident.

MR. SAM COLLINS: Okay. I just -- Sam Collins. I

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MR. ELLIOTT: Okay.

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just want to be clear, Carl, I've got -- on this slide, I picked two issues out: one is waiting NRC risk-informed

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approach and there's an offer that's on the table, I think, for review; and then the other issue is three quarters of

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the way down, where we talked about halfway addressing the

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research program does not adequately address the debris

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generation and that the Owners Groups still supports the

original positions. Are those being worked in forums that

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you feel like --

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MR. JACOBS: the issue with the debris generation is we feel very uncomfortable -- there's too much concern with using the PWR OG data to try to scale OG. There's another way of using inside judgment. We'd like to see how we can work that out, but we know the resources are limited on how to address that. We're actually just putting on the table that that's an issue. When you do your evaluation, we've got to make sure that that conservative judgment is as realistic as possible.

MR. SAM COLLINS: Okay. And you feel like you will be able to work through that issue, as part of the

process we're currently engaged in?

MR. JACOBS: That's correct. I still think we can

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work it out. We haven't gotten to that issue right now.

MR. SAM COLLINS: Okay. And the issue of the risk-informed approach, Rob, will we respond to that once we see the letter?

MR. ELLIOTT: Yeah, absolutely. I just wasn't aware of the letter, so I haven't had a chance to look at it.

MR. JACOBS: The research -- Grant was going to put out recently another workshop on that issue and right now, we haven't heard when that workshop is going to be done. It's supposed to be done this quarter. I think it may be postponed into the new year. So, that's one of the other driving forces. We expected to hear in November, but now it may be postponed.

MR. SAM COLLINS: Okay.

MR. TIM COLLINS: I still have a question of clarification here. When you say "WOG still supports its original position," I thought the original position that you sent in was on the interpretation of GDC-4, not on -- okay.

MR. LIBERATORI: That's why it's here. But, basically, it's the same benefit --

MR. TIM COLLINS: That's no different than the use of the debris generation -- you know, whether it's being engineering -- it's an engineering judgment call or not, that's different from how you interpret GDC-4 and the applicability of the debris generation to LOCA. Now -- so, when you say it still supports the original position, you're saying you disagreeing with the position the staff issued in its 1999 letter back, which said this is the way we see

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GDC-4. Is that what we're saying here?

MR. LIBERATORI: Well, we interpret it -- we interpret the staff's position as -- that this is where you were at the time we met and discussed it.

MR. TIM COLLINS: That's correct.

MR. LIBERATORI: However, you were going to consider it and maybe rethink it after you had done this work.

MR. TIM COLLINS: Now, that's not what the letter was intended to say. The letter was intended to say, here's the way we see GDC-4. Now, if we need to change GDC-4, you know, if we need a rulemaking, we need supporting information to do that, okay. And this research was supposed to develop supporting information to any changes in the regulation; or if it turned out to be a more significant risk area than our initial study showed, possibly back that. But, it wasn't to contribute to the interpretation of GDC-4. It was to contribute to any additional regulatory action that may be taken, whether that be a change to the regulation or some additional back fitting consistent with the current interpretation of the regulation. That's what the letter was intended to say. If you got a different message, then we need to talk about that letter.

MR. LIBERATORI: Okay. I guess just for Sam's benefit --

MR. BAILEY: There are actually three here.

MR. LIBERATORI: Yeah. What the three Owners Groups really -- what the three Owners Groups were really trying to say is that the generation is created by the

specifically says the dynamic effects of the break can be excluded, based on before break, and we use that application in a number of arenas. So, if the forcing function is the dynamic effects -- you know, if our position was GDC-4 already excludes the dynamic effects, that's why the debris would be limited, and that was our position.

dynamic effects of the break. And the way we read GDC-4, it

MR. ELLIOTT: This is Rob Elliott, again. You're focused on the words and not so much on the intention of the rule. When GDC-4 was put out, it was talking about type of constraints, physical protection of equipment important to safety. It wasn't talking about whether or not debris would be generated, okay. And when we're talking the issue of strainer or sump clogging, what we're talking about is the functional design of the ECCS. We're talking specifically about the functional design of the sump, okay.

So, it's not -- when they wrote the statement of considerations, they recognized there was this dichotomy. On the one hand, when you're talking about dynamic forces and impacting equipment and that sort of thing, we recognized that -- or you take credit for leak before break. But, we said specifically in the statement of considerations, functional design is of containment and the ECCS would still retain to one in -- in break. And 50.46, also, is pretty specific about all breaks up to and including, as you noted on your previous slide.

So, the research program that we're doing right now is really not focused on -- it would provide us supporting information, but it's not focused on redefining

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50.46 or even, you know, defining the risk-informed, you know, 50.46. We're using risk as a tool to help us assess the significance of the issue. But, we're not going the mode about -- of a rule change or changing the rules or determining whether or not we can -- it's okay to apply to 50.46.

MR. LIBERATORI: I understand. That's why I think we've agreed to disagree.

MR. ELLIOTT: Yeah.

MR. LIBERATORI: The same jet has to be considered here and not considered there.

MR. SHERON: Let me ask you, when we changed the interpretation of GDC-4 in the first place, and the reason was, is because we said, you know, until we come up with a better design basis for containment, okay, I mean, to just to sit there and say we're going to eliminate the double guillotine and give credit for leak before break, you know -- you know, I remember back in the early '80s when we did that, you know, the question was, fine, what are we going to design containments to, all right? Are we going to have people coming in saying that, you now, I can eliminate leak requirements and all sorts of other stuff, and nobody had an answer as to how we were going to handle that whole big issue.

So, that's why the leak before break was restricted to the pipe restraints and so forth for the dynamic effects. And the idea was that when and if we come up with a better way to design -- or to come up with a

design basis for containment and ECCS, you know, we're

-- this is strictly a matter -- the staff has an itch, okay. Somewhere down the road -- I mean, if we decide that the sump designs are inadequate for PWRs, the burden is on us, okay, to make that case and to follow our own internal procedures for back fitting; and in doing so, we would obviously, you know, have to make a risk argument and the risk argument would have to be based not on something that's overly conservative, but we'd have to take into account the recognition that pipes don't instantaneously --

MR. BAILEY: It seems to be a subset of the large break LOCA issue we talked about earlier, obviously, because this is one application of where you're driven down a certain path because of that requirement, where it may or may not be necessary, I guess, in the big scheme of things. But the other part of it is what you design your systems to versus what do you have to make -- to operate them under, too. It seems like that's a subset of this, too, the sense that you want an over design capability to ensure that it can meet even the unsuspected or the unreasonable expectations on it; but on the other hand, you want to be able to eliminate unnecessary regulatory burden, too, and how do you work for that process.

MR. SAM COLLINS: I would just ask that we don't continue to agree to disagree. I mean, if there's a question -- OGC is the office that interprets our regulations for us. So, I think if you feel like this is a barrier to getting to where we need to go, then there are ways to approach that and the agency will provide that original interpretation, if we haven't --

1	MR. ELLIOTT: We went to OGC
2	MR. SAM COLLINS: You went to OGC?
3	MR. ELLIOTT: and they were in agreement with
4	the position of the staff.
5	MR. TIM COLLINS: But, we do have a process,
6	though, to deal with this. I mean, the risk-informed
7	approach is the way to go on issues like this, you know,
8	where there's a clear disagreement and it involves judgment
9	a lot of judgment. I mean, the risk-informed approach is
10	the best way to go. So, that's what we need to head.
11	MR. SAM COLLINS: The risk-informed approach is in
12	the application, not in the
13	MR. TIM COLLINS: Well, if you need a change to
14	the regulation, as well.
15	MR. SAM COLLINS: Then, you have to change but,
16	you do have to change the regulation.
17	MR. TIM COLLINS: Yeah, processes all the way
18	around.
19	MR. NEWTON: Just a comment I would like to make.
20	The words in GDC could stay the same, if the statement of
21	considerations reflected the debris generation aspects of
22	it. That's all we're talking about.
23	MR. SHERON: What we're saying, though, is that
24	would require a rule change, too.
25	MR. NEWTON: It would require that process to be
	exercised.
7	MR. SHERON: Yes, that's right.
N R	MR. SAM COLLINS: Are we back to where we are with
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MR. LIBERATORI: Yeah, and we'll communicate it

after some point of context.

2 3 MR. SAM COLLINS: Okay. Yeah, I think the message

from our end is that we understand where you are. We can

either self initiate a process or you can ask us to initiate

a process. But, clearly, right now, the process has to move

one way or the other, to resolve the last statement here,

the disagreement in --

MR. BAILEY: I think the burden is on us right now

to take what you told us and go back and do a summary of

what your concerns are.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: We initiated this program a

14 couple of years ago, prompted primarily by experience in

15 Europe and Japan. As you know, we have a number of

16 objectives, the first one being to establish and maintain an

17 adequate safety level for all of our Westinghouse plants

18 and, then, also to proactively develop a systematic program,

19 which would assess this issue, both short term and long

20 term. And that had components such as evaluating it

21 technically and from a safety aspect, doing so in a manner

that would minimize our regulatory risk, also minimize the

23 cost to the WOG and what's the most cost efficient way to

approach the issue, and make sure we had an integrated

long-term plan.

So, we put that whole program in motion.

Considerable resources have been applied to this thing over the last few years, including a number of lead planting and

very expensive lead plant examinations on site. The site

work that was under the WOG umbrella, if you will, has been completed and that's, in essence, some of the initial baffle bolt inspections, as well as remove or replacement programs. We have bolts from Farley, Point Beach, and Ginna, have the hot cell. They're in the process of -- well, they're in the procedure process to be examined. Hopefully, we'll have some information from those in the not too distant future.

In the meantime, we're continuing the analysis of acceptable bolt and distributions, based on what we learned from the lead plants. We have grouped all of our plants by number of loops, whether they're up-flow or down-flow. So, we're kind of plodding through the groupings, if you will, establishing -- using the accepted methodology and establishing acceptable bolt patterns that they could use for their consideration, in terms of any future work.

And we're, also, integrating some of the more generic aspects of the program we initiated with the MRP, since the MRP does exist now. There is an ITG that's dealing with the internals issues.

MR. BAILEY: What does that acronym stand for?

MR. LIBERATORI: Materials reliability project
that, I believe, they've been in to talk to the staff. They
just initiated over the last year one of the -- I believe
there are four major programs they're working on now and the
reactor internals is one of them. So, a lot of the hot cell
work, the funding is actually being picked up by MRP now.
So, we are integrating there, again, making sure that
they're avoiding duplication of effort and the items that
are truly generated -- you know, being treated that way, so

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MR. GRUBELIC: Frank Grubelic.

MR. LIBERATORI: Thank you.

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MR. SAM COLLINS: Sam Collins. Roger, have you thought through how to put this information out, at any

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given point in time, for industry consumption? Are you

going to go through the industry groups or coordinate to the

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Owners Group or --

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going to be rolled into the EPRI/MRP program. And so it

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will be available to the industry through their, you know,

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reports and information releases. If you go to the next

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slide -- I'm kind of jumping ahead -- we're hoping to meet

with you and bring you up to date. Let Lou go through that.

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MR. LIBERATORI: This one?

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MR. NEWTON: Right.

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MR. NEWTON: Just about all of the WOG results are

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MR. LIBERATORI: Again, sometime early next year, there will be a joint meeting, which will be asking for us to present the results of where we are in this. Again, the future work would be to complete the remaining analyses. We have done all of the strategic efforts, in terms of identifying the approach, the methodology, how one determines an acceptable bolt in the pattern. And we're really into just completing the analysis for the plant groupings, at this point, and then feeding back any results that come from the individual hot cell examinations.

Some of the two and four loopers that are down-flow plants are looking at extending leak before break to smaller sizes, with the intent, saying, you know, what affect does that have on the number of bolts that has to be

A N R: replaced. At this point, that's really just an evaluation phase.

Given where we are strategically -- and the program is, to some extent, winding down, if you will -- we plan to propose to our members the transition of the baffle bolting program from a working group directly under the steering committee, to material subcommittee for a number of reasons. One is, you know, we do have the involvement of MRP and a lot of the higher level strategic items. A lot of the strategic items have been resolved. The objectives for most of them have been achieved and we're really just into completion of the analysis. And for the most part, it's the material subcommittee representatives that are attending the baffle bolting working group meetings anyway. So, it just seems like a natural point to just transition this down to the subcommittee, to basically carry out and complete the rest of the program.

So, that's where we plan to go with that. And I guess our overall conclusion still is that safety of our plants have been established and we still believe it's an aging management issue and that we have a long-term program in place to feedback inspection results and be able to manage the issue.

MR. SHERON: This is Brian Sheron. You had said this was a MRP/EPRI program. Now, is that -- are there any restrictions? Because, I know not everyone is a member of EPRI, so does everybody get this information or it's only EPRI members that get the information?

MR. NEWTON: Do you want me to talk about it?

MR. LIBERATORI: Yeah.

member, as well.

N R MR. NEWTON: The program is being classed -- my name is Roger Newton -- as a category 1 EPRI program. So, when non-EPRI members need that material, they're able to buy it and they have an annual requirement to almost buy it. Anything that comes up as related to safety is classified as Class One and non-EPRI members are ending up buying that every year. So, they have access to it. So, it fits in that category. Most of the information and the long-term forward plan will probably be in the MRP program and the

I think that group will then have to figure out, okay, what's necessary to feed back into the long-term programs of the utilities, probably more related to license renewal than to, you know, the current operator. So, that's a long-term effort.

WOG, you know, is participating in that, as an active

MR. BLOOM: Did we skip over generic district 23 temporarily to include the break time?

MR. BAILEY: This program is probably an example of where we took a generic issue that was predominantly one Owners Group, which took the lead, but they were able to coordinate it and work it through the industry. At the same time, that was changing, because the MRP wasn't even in existence when we started this program and that got formed, you know, along the way, too. So the issue about how do we deal with generic issues, this is certainly one example of how it can be done, but it doesn't work for all issues, as we know, under ASME.

A N R: Li MR. SHERON: Well, this was one that was actually initiated by the industry, not by the NRC, and we've kind of -- you know, kind of just sat on the sidelines and monitored, you know, how you are proceeding with it, without really, you know, getting involved from a regulatory standpoint. So, from that standpoint, I think we've been, you know, fairly pleased on the way you've taken the initiative on this.

MR. SAM COLLINS: What's not clear is the regulatory issue here, I think, initially, at least, so certainly, we're interested. I mean, we're monitoring, but we're very interested. I think the efforts have been very productive. I'd be curious -- Chris, how would an item like this be captured into the age related degradation program.

MR. GRIMES: My name is Chris Grimes. I'm the chief of the License, General and Standardization Branch. And it gets captured in the context of the adequacy of the agent management programs for reactor vessel internals. And to the extent that we've ended up struggling somewhat trying to understand the distinction between the Owners Groups activities, primarily we learned some lessons in terms of feedback from the Oconee review that literally spilled into the Calvert Cliffs conclusions, because of a lack of understanding about how MRP is dealing with the vessel internals for decals like void swelling, extent of IASEC, the nature of enhanced inspection techniques. All of those things are questions that are coming up in the context of trying to find a theme and a consistency between the owners.

Yes, you've -- we'll get into a little bit about

how we've been dabbling in WOG topicals, but not really developed any conclusions, because all of our energy and effort have been concentrating on developing findings of adequate aging management programs for the CE and the B&W plant. But, that doesn't mean that we haven't continued to make progress on the Westinghouse work.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: I've been asked to reverse the next two items, so I'm going to cover the license renewal first.

MR. GRIMES: For which I'm very grateful.

MR. LIBERATORI: Basically, we've had five generic topical reports submitted. Of course, staff reviewed. They are on the topical status table at the end of the presentation. But, beginning with the RCSD supports, which we're up to Rev 2, which was submitted in March of '97. The initial one was July of '95. In this case, we responded to two rounds of RAIs and I guess it was under -- it was our impression that the draft safety evaluation was supposedly new sign off, but approximately two years ago, and we basically haven't heard anything yet.

The remainder of these have all been submitted in the '96, '97 time frame. We responded to RAIs here and responded to additional question on class one piping.

Again, RAI has been responded to, as well as to additional questions. We've responded to some RAIs on the containment structure GTR. We haven't had any feedback yet. And on the reactor internals, we do have additional responses, which we are working on that we're going to submit, you know, this

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month. And I guess we just observed that when we were doing some project tallying, we've, basically, paid almost \$335,000 in fees for the review -- for the combination of reviews here. And we haven't received any SCRs yet and I guess we'd be curious what the status was.

MR. GRIMES: And that status -- first of all, I apologize. You should have been getting some more cogent feedback, in terms of what progress we've made. RCS supports SER. Actually, it wasn't very near in November '97. That was -- that ended up being a trial effort on our part. That was one of our first attempts at righting a topical SER for license renewal. And quite frankly, it's been completely rewritten since that time, to factor in some of the lessons from the Calvert Cliffs and Oconee's review.

You' haven't heard anything, and that's good news. We haven't needed any further information. But, it, also, suffers from a lack of schedule driving. Actually, we suspended work on the Westinghouse topicals in '98 and we only resumed earnest effort on the Westinghouse topicals early last year. And that figure looks about right. You haven't been paying for all of the experimenting we've done with your topicals, but we have been making progress. I'm hoping that we'll have some products out here for you very shortly. But, we're still concentrating our efforts on the products for the Calvert Cliffs review and the Oconee review. And now, we've distracted some talent to go off and do generic aging lessons learned, in response to the industry concerns about the standards for augmenting aging management programs. So, you suffered a little bit from

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that, too, because we distracted some of the talent that was working on these safety evaluations.

We haven't charged you -- you've gotten more effort than is reflected in that value, because we have been working this almost as a fourth, fifth, sixth priority, in some cases. But, we've been continuing to work it. We haven't charged you for all the experimenting we've done on your topical evaluations. But, I will make a point of making sure that one of those products breaks out of here soon, so that you'll have some tangible evidence to account for the investments you've made.

MR. SAM COLLINS: Chris, I need to understand perhaps from both sides here how we define success for this.

I mean, success is to have these reviews complete by the time that Westinghouse --

MR. GRIMES: A time for them to be referenced by Turkey Point, which will be the first license renewal.

MR. SAM COLLINS: Right. So, if we back up from there, where are we on our schedule?

MR. GRIMES: Turkey Point submittals due in 2000 and -- June of 2001, I believe, so long as I get them done in calendar year 2000.

MR. SAM COLLINS: I think -- again, what I'm asking you is -- perhaps we need to sit down internally with the benefit of our stakeholders and lay out the schedule for getting these out and be sure that being in anticipation of supporting a license renewal, so that the process is one of instead who is who, what, when. And --

MR. NEWTON: We have -- the license renewal group

is meeting in the next two days, so this is a subject that I'll bring up with them. I'm not wanting to guess at Turkey Point, but they are starting to do their aging management reviews and topical report approval dictates how you do that review and what you reference. So, we're running out of time, to be able to -- for Turkey Point.

MR. GRIMES: Unfortunately, so does Gaul and so does the standard format. Turkey Point told us to work on Gaul and the standard format, for the topicals; that they want the topicals, too. So, you know, give me some targets that you think are realistic, in terms of completing the topical evaluations, and we'll try and fold them into the plan and we'll go get some more resources.

MR. SAM COLLINS: Yeah, I mean, that's what we need to do. I mean, it's -- the expectations just have to be clear and, you know, of course timing is everything in these. And then we will even budget for it or we'll have it. And then we'll sit down and go through our internal processes and find out what the impact is. But, clearly, there's a startup cost with these. But, if we have external stakeholders, who are relying on this to do work, then we need to recoup a little bit and understand better what the needs are. So, I think that's a short-term issue that we need to get feedback on.

the drivers. We do have several Westinghouse plants indicating interest in license renewal. They want to refer that. And, also, the current program we have in place,

MR. LIBERATORI: The next slide, I think, shows

which was originally envisioned to be a five- to six-year

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program, is -- you know, as a WOG, we're ready to kind of close that and move on to where we think we need to be, which is, you know, a supportive role as the applications actually come in. So, we're at that turning point as a WOG now, trying to move from the original program to where we think we need to go.

MR. SAM COLLINS: So, Roger, I'm hearing there will be a meeting in short-term to lay this out?

MR. NEWTON: The next two days we'll talk about this. Chris, we'll get back to you. Really, Turkey Point needs to be identify their needs. Beyond Turkey Point, we still want to be able to use these. And there are some utilities coming right behind them; if they can't use them, the next ones will.

MR. GRIMES: I'm as anxious as you are to try and bring closure to these. They've, quite frankly, suffered from a lack of priority, because we're looking at trying to support milestones that are next week, next month, next year, to lay more the groundwork for all of the folks that are now signed up to submit applications in 2001, 2002. You know, we're now trying to get smart about how we're going to prepare for the bow wave, and issuing the Westinghouse topicals is, you know, one of the things that we need to do. We, also, need to -- we've got one more B&W topical to finish, too, that we need to finish before February of next year.

But, we were, also, looking at -- you know, we put some more attention on the infrastructure pieces that the industry as a whole wanted, like the standard format. And

now, I expect we're going to, you know, put a lot of effort in on Gaul and trying to concentrate on the -- for the industry, as a whole, which of the programs need to be augmented for license renewal. Clearly, reactor vessel internals is an area where there's still a lot of work to be done between the industry and the NRC, to come up with some common aging management attributes. There are some subtle areas in, for example, containment structure, where there's some details to iron out. We're still trying to resolve industry questions about how much credit to give for IWE, IWL, and how far does that go and how much implementation experience is there -- some of those details.

I think the RCS supports -- I'm not going to say that it's near closure again, because that's what you were told in '97. So, I'll just tell you, that's the one I think that's closest to completion and I'll concentrate on trying to close that one.

MR. SAM COLLINS: Okay. As long as you understand the expectations and we'll go into our planning process.

You know, we'll test it, certainly, but we're going to our planning process and then Chris's role is to determine the amount of resources needed to bring that up. We'll make adjustments.

MR. LIBERATORI: GSI-23 closure: I mentioned up

front that we haven't been involved in the meetings with staff. We discussed the approach to closure of GSI-23. We, also, made a presentation at the October 1, ACRS meeting.

ACRS did agree with closure of the generic aspects of it,

based on the steps intended to go to look at specific

N R: L: plants, with respect to risk sensitivity.

We, within our WCAPs, as well as our individual IPEs, have assessed seal LOCA from reactor coolant pumps and believe, at least for our plants, the core damage frequency sufficiently low, that the event does not speak of the risk significance, as far as we're concerned. We do have the WCAPs still on the table from 1984, the last rev, to 1986. As a WOG, we're still requesting an SER on that, because a lot of people have used it for licensing purposes, as well as their IPEs, and I guess lost in all of this is what the staff's intent of what that WCAP is, as part of its closure plan. We were curious, you know, had you come to a conclusion about how you intend to deal with the WCAP or not.

 $$\operatorname{MR}.$$ TIM COLLINS: I don't think we thought about it.

MR. SHERON: A resolution of GSI-23, and now that seems to be a reality, that's a question we have to answer. But, I don't think we thought about what to do with that topical report.

MR. TIM COLLINS: Yeah.

 $$\operatorname{MR.}$ SHERON: We'll get back to you on how we want to proceed on that WCAP.

 $$\operatorname{MR}.$ SAM COLLINS: What's the -- is there a date certain that you are --

MR. LIBERATORI: Well, it represents the Westinghouse sealed model, if you will, the PRA model, in terms of the probabilities, as well as the flows, and many of the members have used those in station blackout. They've

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used them in IPEs. So, it's a model that people have used and it was submitted, again, at that time, for staff review and concurrence. And it's been tied up in the GSI-23 resolution, basically, for the last 15 years. But, if it were to not get an SCR, be withdrawn, as an industry, we have to decide how we want to deal with that, because many people have used this in a number of different places.

MR. TIM COLLINS: It's a complicated problem, because the closure of the issue doesn't agree with the Westinghouse WCAP. It closes the issue, but it doesn't agree with the model in the WCAP. So, it's not just like we put a stamp of approval on the WCAP and send it back saying, it's been approved as part of the closeout of GSI-23, because they don't agree. So, it's not just a simple problem.

MR. LIBERATORI: I guess it's our understanding the staff did use the Westinghouse model as the starting point for their own work.

MR. TIM COLLINS: That was the starting point, right. But the model -- they, ultimately, issued, as the research model for Westinghouse, pump CS. It's different than the one that you've submitted.

MR. SHERON: The point is that, you know, we've never said they're not in compliance with the station blackout rule.

MR. TIM COLLINS: Right; right; right.

MR. SHERON: It's our burden, okay, and we recognize that. If you look at the closeout of 23, it, basically, says it's our burden; that if we feel that there

are some plants out there that may pose an unacceptable risk due to pump seal failure, we will analyze them and we will engage probably those licensees on a plant specific basis and the like. So, I would probably argue that regardless of whether or not we've issued an SER or not on that, the burden is in our -- the ball is in our court; it's not in yours anymore. Your plants meet the regulations.

MR. TIM COLLINS: The closeout of 23 says the station blackout rule is finished, as far as the pump seal stuff goes. That's the recommendation from Research.

However, this -- the approval of this model, I think, creeps into a risk informed space now, because it's going to be used in risk-informed considerations. And if we're not in agreement for its application in that arena, I'm not sure where we are. We've still got a little bit of disconnect here on what this seal model really means and how it's going to be used in the future.

This is not -- the WCAP doesn't address specifically just station blackout. It addresses a specific sealed model used for all applications. The closeout of GSI-23 says station blackout is okay; it doesn't need to be revisited. But --

MR. SHERON: We were hoping that the ASME committee that is providing the guidance on PRA standard, you might say, you know, we specifically are asking them to address the issue of what is the standard going to say regarding a pump seal model.

MR. LIBERATORI: It took a while to get the flashlight back on. I just want to make sure it doesn't --

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MR. SHERON: Sure.

MR. SAM COLLINS: I guess, Tim, maybe we should just check to see where this is in the priorities, now that we have the guidance; look at how this is --

MR. TIM COLLINS: Sure.

MR. SAM COLLINS: -- prioritized.

MR. TIM COLLINS: Sure.

MR. DRAKE: I guess I would add one thing. In the past, we've gone out to individual plants; we've been asking questions on the seal models that they've been using, for our WCAP cap, which are really generic in nature. And instead of asking the individual utilities, those questions really should be coming back to the Owners Group. Because, utilities come back to the Owners Group to us and say, hey, I'm getting these questions on the WCAPs and it's not a plant specific question, it's a question on our topical report, and we've had to come back to the staff with those and say, that's really a generic question; bring it up generically, don't bring it up in an individual plant. So, I would ask you to look at that, as you're going after the individual and assessing the individual plant, as to the generic applicability of the question you're really asking.

MR. TIM COLLINS: You said this has been happening already?

MR. DRAKE: Well, the last -- I've been following this for the WOG for about 10 years. And going through this three- or four-year cycle, where all of a sudden a couple of plants get asked questions on the topical report, it comes back to the analysis subcommittee. We've come down and

talked to the staff on the WCAP. We've explained what it is. They said okay, they'll get back to us. A couple of years later, a couple other utilities get a couple more questions and it's the same cycle. We've made three or four trips in the last 10 years, basically, on the mall.

MR. LIBERATORI: NUPIC/Technical Audit: this was an evaluation that we helped set up. It was not funded by the WOG, but, basically, was the NUPIC team doing an audit of Westinghouse's analytical capabilities, if you will, and how they process that type of work in-house. The NUPIC team, those teams tend to be fairly large. In this particular case, there were 36 people from 24 different utilities that were involved in this team and what we did do was solicit the assistance of five technical specialists, five utility members from our analysis subcommittee to work with the NUPIC team, you know, strictly from a technical point of view, not only to assure that they were looking for the right things, but there was information we wanted to bring back to the WOG, too, to satisfy ourselves.

So, that was held, basically, the first week of May. And the scope, basically, looked at both the active large break LOCA models, both the BART/BASH, as well as the Best Estimate Model, and looked at the NOTRUMP small break. We looked at the process for how internally Westinghouse deals with 50.46 and the generation of information for the reporting that's necessary, and, you know, a number of other items that the audit team was pulling the string on, as they were going through their audit. So, basically, we tried to cover the gamut of loss of coolant work within

Westinghouse's shop.

And we do have an audit report out. It's available to us. We, at NUPIC -- again, this was not a WOG report. You know, given the huge amount of -- almost 150 man -- persons of effort, if you will, we were able to come up with three findings and one observation, in dealing, you know, technical primarily with that work, which we thought was amazingly low. So, as a WOG, we were fairly happy with what they came out with.

Westinghouse is in the process of responding to all of those items. And the way the WOG is staying plugged in is those individuals from our analysis subcommittee are following the response to those issues and providing oversight on our behalf to the closure of those items. So, we were fairly pleased with the LOCA work.

MR. SHERON: This is Brian Sheron. One of the things I was curious about, first of all, how many people were on the audit team and what -- their expertise, I presume, was in like thermohydraulics LOCA and everything?

MR. LIBERATORI: To some extent. It was a fairly varied background. Typically the NUPIC teams are. You know, we provided the five technical people from our subcommittee, just to make sure that we had, you know, direct analytical capabilities.

MR. SHERON: That wasn't -- the original concern on this was that when the industry went out and audited the vendors, that it wasn't just a paper audit to make sure that the right dotted lines got signed and everything, but to make sure that, you know, the technical work was up to

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The other question I had was if -- do the WOG

members, they have this NUPIC audit report on file somewhere

as, I guess, demonstrating their complying with Appendix B,

in the sense that they've gone out and audited their

vendors? So, I mean, if an inspector came out and looked,

they could go into the files and find this NUPIC report that

said that, you know, I've complied with Appendix B?

 $$\operatorname{MR}.\ LIBERATORI:\ It's available to any inspectors $$$ who ask for it.

MR. SHERON: Okay.

MR. LIBERATORI: Typically, they work through the quality assurance organizations of the utilities. But, in this case -- to answer your first question, you know, we did provide five of our most experienced guys from the subcommittee, who had been involved in analysis for many, many years, to assure ourselves that we did have the right technical --

MR. SHERON: That was sort of a critical part of the NUPIC follow-up after the Siemens issue, was to make sure that the audit teams had the qualified technical people on them.

MR. LIBERATORI: That it was not a paper review.

MR. SHERON: Right.

MR. LIBERATORI: Exactly.

MR. SHERON: When you're all -- I guess you're telling me you're kind of satisfied that --

MR. LIBERATORI: We're satisfied.

MR. SHERON: -- what NUPIC is doing is meeting

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1 -- it's become more prevalent over the last few years to 2 have staff send us some draft reports for comment. And, you 3 know, we appreciate that and we want to comment on those 4 items. But, typically, there's a 30-day turnaround time and 5 I've listed, I think, the last that we've gotten, that we 6 commented on, and the 30 days has turned out to be somewhat 7 tight for us, for a number of reasons. One is we have to 8 get the comments from the members and consolidate them and, 9 in some cases, depending on the issue, we may be talking 10 with the other Owners Groups and NEI and 30 days tends to be 11 pretty tight. 12

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And, also, we have to, as a steering committee, get some funding in place, because we don't have a slush fund sitting out there, you know, whether to comment on draft reports. So, you know, we have to do a little bit of work to get some funding in place to get that done. And I guess we were curious whether the 30 days is something that you've established arbitrary, whether they can be somewhat flexible in the future to allow us more time -- you know,

provide the comments on these things.

I know on the AOV report, you know, we specifically asked for a delay and you allowed us more time to comment on it. That one tended to be -- I mean, I think it was a few inches thick and we need a lot of time to get through that one. Again, we appreciate the request and we do want to comment on these things. I just wanted to put you have a little more time to do it.

MR. DEMBECK: My name is Steve Dembeck. I'll respond. I talked with Research. A lot of these issues

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were AEOD items and there was a big backlog and I guess they're just trying to close them out as quickly as possible. They've told me if you get a particular issue and you need more time, whether it be 30 days, or 45, 60 days, whatever, you should just contact the point of contact listed on that -- on the letter to you.

Obviously, we're sending it out for peer review, therefore, we do want you to give a good thorough review of the product. And we'll try to work in the future on getting far fewer of the 30-day request.

MR. RICHARDS: Stu Richards. One of the things we're doing with licensees is we negotiate the -- we negotiate a date, I guess, and we put it in the letter saying, hey, we talked to somebody on your staff and we agree to respond back a certain date. So, maybe we can try and get -- explore getting more into that mode and, you know, negotiating what's a reasonable time to get back.

MR. LIBERATORI: I know the case of the AOVs, the date of the actual document from the Brookhaven, I think it was, was more than a month prior to the date of the letter requesting us to comment on it. And we found out about it by receiving -- I, personally, received it in the mail. We didn't even have a warning that it was coming, and we had 30 days to respond to it. So, we certainly would appreciate either a heads up or

MR. RICHARDS: Sure.

 $$\operatorname{MR}.\ \operatorname{LIBERATORI}\colon$$ -- and then the ability to negotiate is fine.

MR. SHERON: This is Brian Sheron, again. I have

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periodic meetings with our Office of Research and let me bring this up and put this on their radar screen and see if they can -- I mean, if this is common to other Owners Groups and stuff, rather than just sit there and negotiating all the time, I think we should just see if we can expend the period of time to say -- what do you believe is reasonable? What sort of a date -- I mean, is 45 days or 60?

SPEAKER: At least 60 days.

MR. LIBERATORI: Sixty is a good time.

MR. SHERON: Okay.

MR. LIBERATORI: If you can tolerate it.

MR. SAM COLLINS: I think that's reasonable. We take -- study 10 years worth of data and 60 days to review.

MR. LIBERATORI: Okay. I have WCAP tables. If you recall about a year ago when we were down here, I think this first table was some 15 item or so long. And we're very pleased with the progress we've made with the staff on getting SCRs out and in some of the cases, we've gone back and looked and withdrawn a few. So, we've been able to scale this list down to -- right now, essentially, it's just three.

The post-accident sampling WCAP, which we discussed earlier, the break opening one, which is still on the table from a generic perspective, and the RCPC WCAP we just spoke about a few minutes ago. And then separate from that, we have -- we have still listed the five license renewal WCAPs separately at this point. And we're just carrying dates, as last we received them, but we understand -- you know, we'll be talking about those.

already.

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Right now, that's all we have on the table dy.

MR. SAM COLLINS: Do we need to focus on any of these, other than we've already discussed, Lou?

 $$\operatorname{MR}.\ LIBERATORI:\ I$$ think we talked about all of them.

MR. SAM COLLINS: Okay.

MR. LIBERATORI: The next sheet shows some anticipated -- the next year to year-and-a-half. This first one, the ASICS replacement modules for the protection systems is a subgroup effort. Within the WOG, a subset of utilities can get together and work on something separately. So, this is not a generically funded WOG program, but it is one of our subgroups. And that subgroup does plan to come in, in the first quarter, sort of carry them on the table here. And we have a number of generic programs here, mostly dealing in the risk-informed area.

The logic and reactive chip AOT and STI extensions is really an outgrowth of some of the programs we've had ongoing that you've issued SCRs on this. This was a follow-up phase to some existing programs.

The risk-informed ATWS, we've had some several meetings over the last year on that and, you know, we believe they were commonly headed in the right direction on that. And we plan to have that in the middle to third quarter of the year. And the remainder of these are risk-informed AOT extensions that we're working on in-house, as a WOG, and we're, also, looking as to how that gets integrated with the overall industry effort on risk-informed

1	tech specs. These here are pieces that we're working on
2	that, at least at the current time, we plan to come in with
3	WOG submittals for.
4	MR. SAM COLLINS: Are any of these going to have
5	lead plants with them or are they going to be
6	MR. LIBERATORI: I don't I'm not sure. South
7	Texas has stepped up for a number of these, but I don't have
8	that breakdown at this point.
9	MR. SAM COLLINS: They had their list of
10	exemptions, as you know, that they've come in for.
11	MR. LIBERATORI: Right.
12	MR. SAM COLLINS: Okay. So, I guess we would ask
13	you to put those together.
14	MR. LIBERATORI: No, they are Wayne Harrison,
15	South Texas, happens to be the Chairman of the Licensing
16	Subcommittee; so, clearly, this engagement there.
17	MR. SAM COLLINS: Okay. Because, that
18	reconciliation would help us plan our resources, as far as
19	what we're already focused on and, clearly, South Texas is
20	looked at as more or less a pilot for option two for
21	risk-informing Part 50.
22	MR. LIBERATORI: We're still framing our strategy
23	on that, as well.
24	MR. SAM COLLINS: Okay. It might be Brian, you
25	can decided, but we might want to consider once you do that,
	sitting down at a meeting and ensure that we have these
P	parceled out correctly, not only externally with the Owners
N R	Group, but internally. Because, Part 50 would drive if
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1 prioritized. 2 MR. LIBERATORI: We need to integrate with the 3 other Owners, as well. 4 MR. SAM COLLINS: Okay. 5 MR. SHERON: For the most part, we look for in 6 plant, you know, for the submittal. 7 MR. LIBERATORI: But, that was a shot, that's what 8 our crystal ball says now. 9 MR. SAM COLLINS: Okay. 10 MR. WALL: I presume that the WCAPS on AOT and STI 11 will contain some quantitative risk evaluations. I got some 12 indication earlier that they were going to be qualitative, 13 but I -- you know, the CI submittals, for instance, we were 14 presented with a 15 x 12 matrix as results, and I don't know 15 it should go that far, but I don't think we can make sound 16 judgments, even with lead plant, based only on qualitative 17 information, if that was the intent. 18 MR. LIBERATORI: I understand your comment. We 19 don't have representatives of the licensing subcommittee 20 here today, so I don't want to directly respond. But, I 21 understand the comment. 22 MR. WALL: My name is Miller Wall, if you didn't 23 hear it. 24 MR. LIBERATORI: Any other comments? 25 [No response.] MR. LIBERATORI: Okay. Back to you, if you've got anything else, at this point. MR. SAM COLLINS: Okay. MR. SHERON: I've got a couple of items here I've

got to kind of just put out on the plate. One is, last week, we had a workshop in Chicago, which was noticed and everything. It was on voluntary industry initiatives. Do you all have any -- we only had 11 people show up and I don't know whether it was just because of lack of interest, or everybody is just totally so happy with voluntary industry initiatives, you have no comments on it.

We were -- it was kind of a double-edged sword. When I talked with my staff, I wasn't personally there, but I talked with Jack Strosneider, and he said, well, the bad news is that only 11 people came; the good news is we had a great conversation there, and the like. So, I was just wondering what your -- whether or not you had somewhere there; where you're coming from on this issue?

MR. LIBERATORI: I guess I need to apologize. We had worked among ourselves. We had a number of conflicts and we did designate -- have designated someone from the steering committee to attend that meeting. And at the last moment, the day before the meeting, something came up with the utilities, so he couldn't attend, and we just didn't have time to react to send another person there.

MR. SHERON: But, I mean --

MR. LIBERATORI: We had every intention of having an individual there.

MR. WALSH: I was at the July one out in Chicago and we intended to be at this one, but it just so happened we had a conflict.

 $$\operatorname{MR}.$ SHERON: Should we schedule another one or is there -- I don't know how --

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MR. SAM COLLINS: Do you have issues you feel you need to present to us that aren't already on the agenda?

MR. NEWTON: I was going to ask how the meeting went and what came out of it; that -- you know, you said good discussions. Are there key points that are new or definite to the --

MR. SAM COLLINS: Did we transcribe the meeting?

MR. SHERON: Yes, it was transcribed. There's a transcript somewhere. The ones I had heard about actually focused in on -- there was a lot of revelations on fees that were being charged and the like, and people were going, gee, I didn't know we were getting charged with that. And, you know, I told one of the staff, I said, you know, I think we ought to take the whole fee thing and give it to the industry and say, you know, our budget is so much, you figure out how much. Because, they didn't realize that for some generic reports that were being submitted, how they were being charged, whether they were being put in the general fee base or people saying, gee, you know, I'm a PWR; I will talk to BWR and sort of pay for that. So, I'm not -- that's my understanding as how the conversation went.

MR. BAILEY: Do you all have guidelines on how you make that determination for meetings; for example, whether you -- how you consider they're generic versus not generic or whether you charge or not charge?

MR. DEMBECK: Yeah. This is Steve Dembeck. The basic rule is if it's related to an application you submit, then we bill you for that; if it's an informational meeting like this, meaning we don't bill you for that.

MR. SHERON: Well, this wasn't for the meeting, itself. This was just for how we review -- for example, voluntary industry initiatives, when the industry submits a topical report, you know, Howard gets charged and everything. So -- anyway, I was just more or less curious whether or not we should --

MR. LIBERATORI: I'll just make an observation that, you know, at some of the industry meetings we intend, there seems to be more interest than what the fees are being charged for and the amounts of the fees. You know, we talk about license renewal a little bit here; but on some of our other programs, we've seen what we think maybe is increased fees over what we've been used to in the past, in terms of staff review of WCAPs and items, to the point where, you know, what we pay for the fees on the reviews is a significant percentage of what we pay for the product in the first place. So, we have seen some tendency in that direction and I think the other Owners have, as well.

MR. SAM COLLINS: Okay. That's -- we intend to discuss that topic at the regulatory information conference, to have a session on fees and billing, so that would be appropriate. But, clearly, any specific examples you have, we should use those as cases, because essentially the staff level is going down.

The level of effort, as part of our planning process -- we have what amounts to be labor rates for our practices and we monitor those. I mean, some are higher than others, but we do monitor those. Part of work planning center is going to be to establish the baseline for those.

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So, we intend to improve as a learning organization. But, I mean, if there's a perception there that there are some outlines, please bring those up and we'll take a look at them specifically for lessons learned.

MR. BAILEY: Did any participate in the workshop?

MR. SHERON: Yeah, they were in the count. I

think -- let's see -- I think Alex Marion was there and Mike

Tuckman from Duke was there, and I think there's one other

from the industry; I can't remember the name.

MR. LIBERATORI: As an example, I think, just recently we received a bill for the ACRS meeting on the PASS elimination. I guess now, is that -- we were a little surprised at that, but is that within the guidelines?

MR. DEMBECK: Well, the ACRS was given a couple of tax to care for that. But, really, what happened there was the invoice you received basically grouped everything together. The ACRS part was eight hours and I believe that will was over 5,000 dollars.

MR. DRAKE: Eleven thousand.

MR. DEMBECK: Eleven thousand. That's over 5,000. So, the ACRS part of that was actually a small part. But, I'm looking into that further and we'll get back to you on that. But, it just --

MR. LIBERATORI: So, we should work with Steve?

MR. DEMBECK: Actually, every invoice sent to you have has Ellen Poteat's name and number on the right-hand corner of the invoice. You're, obviously, welcome to call her, as the first step. You can deal with us, also, whichever is most convenient to you.

MR. SAM COLLINS: I'm not sure I understand the

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A N same week, the exact same day. So, you had people that --

MR. SHERON: My question is do you think another workshop, you know, that was, say, better noticed and a little more, would that be worthwhile for you to have?

MR. DRAKE: Yeah.

MR. SHERON: All right. Let me take an action. I will talk with our Division of Engineering, which sponsored it, and what I may ask them to do would be to contact a lot of the stakeholders and to see if they could come up with maybe a mutual date and have another workshop on that.

Because, I think we're a little concerned that we didn't have enough people there and we don't want to go forward with this program and all of a sudden get a flood of letters says, you know, what are you guys doing.

Another item I had was that -- and Sam said, you know, we're starting with our work planning center, and one of the things we're doing is, in our budgeting process, is we're becoming very well -- I won't say "very," but more sophisticated, okay, in the sense that we project a number of licensing actions that we will receive in the course of the year. And we set our goals and we have labor rates and everything. We can, basically, go back and historically look and say, how many staff hours does it take to process a licensing action. Depending upon, for example, its complexity, there can be easy ones, average ones, hard ones, and each one has a various labor rate.

And one of the things we just accomplished in the past fiscal year was we actually met our goal of processing over 1,700 -- 1,670 licensing actions. It's a fair amount

A N RI and we're getting out backlog down. But, as we do our planning process, one of the things we've done is we've sent out a letter in May -- I believe you all got one -- which really asked, on a voluntary basis, if you could project how many licensing actions each utility plans to submit in the coming year and the coming two years, I believe it is.

The reason is that helps us in our planning, okay. And I just got some feedback from the staff, to find out where we were with that. And it was sort of a mixed reaction, where some utilities were fairly responsive; others, it was like, we don't know. And I think once we got beyond one year, it was anybody's guess. And that may very well be the case, okay; but, I would just kind of put out that it's important to us for our planning and our budgeting, okay, because what I worry about is that if we don't have accurate estimates coming in from the licensees, then we just have to take sort of a rule of thumb and say, well, this is what we think it's going to be, based on a number of factors, okay.

And I was worried that, for example, you know, if we -- for example, this year, I think we're budgeting 1,500. You know, and if I see, you know, 2,000 come in, okay, I don't have the resources. And I don't want licensees to come in and start screaming and saying, you know, we're off getting our licensing actions processed, because Sam said, you know, we've got license renewal. We've got to look for resources for that. You know, so it's very tight budgeting, you know, to the point where we're down to one or two FTE almost.

MR. BAILEY: Did you request that information from the Owners Group or only to utilities?

MR. SHERON: To utilities. It went out to each utility and it basically -- it goes out -- we try and send a letter out every May, with something like a 60-day response time, and that way it helps us in our next year budget. I'm only bringing it up, because to emphasize the importance in our process, okay. And I think in the long run, it helps you, okay, because, then, we know better what we can -- what services we can provide in our schedule.

MR. WALSH: It's Larry Walsh speaking. One of the complications we're having in this issue is the deregulation process, causing financial partner changes, which force license amendments because of the financial situation. I know our licensing manager, about 75 percent of his work is tied up with new owners, just putting them on the docket as being owners. And the technical work is beginning to slip backwards, because we don't have -- the project manager just can't handle the interface. It's just so many things going on.

MR. SHERON: That's one of the areas. I'm not too sure that we're all going to be subject to deregulation.

 $$\operatorname{MR}.$$ SAM COLLINS: It's a different kind of work load.

MR. SHERON: Yeah.

MR. LIBERATORI: But, I'd be glad to carry the message back. And indirectly, it, also, affects our collective WOG progress, as well.

MR. SHERON: I recognize you can't predict

everything; but to the extent that you can really give us some more -- you know, the most accurate estimate you can, I think helps both organizations, both industry, as well as the NRC, in the long term.

MR. SAM COLLINS: We're going to talk a little bit about this at the regulatory information conference, when we talk about our licensing issues that John Zwolinski is focusing on. But, we're going down the path of measuring these products and, of course, maintain safety is always first. But, after that, we may very well ask the industry to provide for outcome measures with these submittals, you know, what is the reduction of burden; what is the schedule for efficiency and effectiveness for the NRC to operate with; is there stakeholder involvement -- those such of things.

And, you know, I think there's a forum to discuss that. And as a business, having eliminated the majority of the backlog and being on a four-and-a-half to five-month turnaround average now, I believe that there's a role, whether it's at the CEO or the operating officer, the license manager operator level, to say, you know, what is --what are my expectations when I submit this licensing amendment; is the licensing department measuring these the same way the NRC is measuring these. Maintain safety is a given. But, are we prioritizing our submittals to the NRC, based on some common understanding, how the NRC prioritizes its work. We need to discuss that. But, I think there is room, everything else being equal, to maintain safety to be predominant for looking at how much burden will this reduce

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and you want us to work on this much burden reduction or this much burden reduction, and is that being focused on -- by the licensees, in the same way it's been focused on by the NRC.

MR. SHERON: The last item I just had was on the weather related NOADs. This is sort of my reaction from last summer. Granted, we had kind of a strange summer with the heat and everything, but were very concerned about, you know, the fact that the grid was really being stretched and we were concerned that, you know, plants were going to come in with NOADs. We had staff standing by. We have some of our projects people, it think, with beepers on and the like.

My question, when it all kind of settled down, was, gee, you know, when I look at the NOADs that come in -you know, our lake level is two feet below where it's
supposed to be in our tech spec or the ultimate heat sink
temperature went two degrees above where it was supposed to
be and the like, and, typically, they come in and there's
always an argument as to why the plant is still safe -- and
so I ask the staff, I said, well, gee, if the plant is still
safe, why are we yanking everybody's chain, not only the
licensees, but the staff, having people come in on weekends
and everything?1 And in our leisure, in the off season you
might say, you know, can't we request changes to tech specs,
such that we don't get into this business; that we know that
the plant is safe, even though that ultimate heat sink went
up three degrees? Can't we submit a tech spec change?

And then maybe it's risk based, okay. I mean, I understand that you may not be able to do a calculation, for

example, you know, that shows if everything is in its worst condition, that you can still meet some licensing grace. But, you know, in this risk-based, you know, environment that we're really advocating, it may be possible to show from a risk standpoint that you can go there, okay, because other parameters may not be at some worse condition, all right. But the whole idea was -- is to try and anticipate where we think these weather related NOADs may go, you know, and let's see what we can do to change the licenses, so that we don't get into this crisis mode that we get into in the middle of the summer and, you know, on Friday night, you know, on July 4th, or something and the like.

So, I've kind of been asking the industry to take a look at that and see is there's something we can do, you know, to save, you know, from us going into the crisis mode from both sides.

MR. LIBERATORI: We can certainly do that. My personal recollection was we were there in the late '80s -
I'm trying to remember -- I think it was 1988, we had a very hot summer and a lot of utilities were in exactly that position then. And I know many of them, mine being one, going back and reanalyzed in the off season, the ultimate heat sink increases and put those in place. Now, I know, personally, we haven't challenged the new limit we established. But, if other utilities are starting to challenge where they went, based on the last '80s, then certainly they should look at it again. I'm just not in a position to say right now, but we certainly can bring that message back. You know, we may be there; we may be

1 challenging what we thought was enough room then. 2 MR. SHERON: Plus, I see with the deregulated 3 environment, in the sense that I think that the reserves are 4 going way down and the like, so there's going to be a lot of 5 pressure to keep plants on line during these hot months and 6 everything. 7 MR. LIBERATORI: Typically, what will happen, too, 8 is that, you know, depending on where you are, it may change 9 with the tide, so, you know, you are in noncompliance and 10 then six hours later, you're in compliance. But, in the 11 meantime, you're taking action, because you are out of 12 compliance, and by the time you've done that, you're back in 13 compliance again. So, you can cycle the plant, as well. 14 MR. SHERON: So, I'm just saying is, you know, I'm 15 looking at this as something that may not go away, okay, 16 and, therefore, maybe we should start to think about how we 17 can address it, so we don't get into these last minute 18 efforts in the middle of the summer. That's all I have. 19 MR. SAM COLLINS: Maybe we can go around the table 20 and see if there are any other issues. Steve? 21 MR. DEMBECK: No. Ii have no more issues. 22 MR. TIM COLLINS: No more. 23 MR. SAM COLLINS: Any staff -- NRC staff issues? 24 [No response.] 25 MR. SAM COLLINS: Should we go over the items we have? MR. DRAKE: We talked about your resource planning. MR. SAM COLLINS: Yes.

MR. SHERON: Yeah.

Fire. Billicon - Team

MR. BAILEY: We tried to do that, as part of this meeting for the next year, but we haven't gone two years out, I don't think, yet, and maybe we need to do some of the work there.

MR. DRAKE: I believe we had talked about, when we submitted topical reports from the industry that were -- I think you used the word "foundation-based issues," where -- you know, like our break open, it really doesn't need a lead plant. It looks at the foundation of the break opening.

And is the resource planning process going to include some allocation to deal with these foundation issues?

MR. SAM COLLINS: They are prioritized. We determine them when we go through the rack up. Where they stack up against the plant specific kind of depends on the priorities. But, clearly, I think you budget so many generic topical reviews per year.

MR. SHERON: Yeah. And, again, as part of the planning process -- and it may be even worthwhile -- I don't think we sent letters out to the Owners Groups. I think we sent out letters to the individual utilities. It maybe worthwhile when we send out letters, to send them out to the Owners Group and ask to get a feel for what topicals, just like, you know, are coming in. Because, we budget for so many topicals and if we see more than what we budgeted for, then, obviously we get the backlog and then we put them on your list.

MR. SAM COLLINS: Ask you to prioritize them, too, would be an input to that.

A N R: LI

1 MR. SAM COLLINS: Yeah. Good. And, again, if it 2 appears like there's a difference of view or sensitivity, 3 then that's what these meetings are for. 4 Let me see, who has been keeping score? Steve, 5 you've been doing that? 6 MR. BLOOM: I was trying. It didn't seem like it 7 really -- the only one I found really was the one on GI-23 8 and WCAP. We have to figure how we're going to handle that 9 one in the future; how we're going to reopen that, take it 10 out of the hole. And I guess in doing so, we have to come 11 back with what they would want as a realistic goal; when 12 their SC would be one SC; how short term, long term we want 13 it, since it has been one of those that hasn't really had a 14 due date for a while. 15 MR. SAM COLLINS: Okay, I have a few here. 16 MR. DEMBECK: Check on the charges related to the 17 ACRS. 18 MR. BLOOM: Right. 19 MR. DRAKE: Brian is going to talk to Research 20 about 60 days. 21 MR. DEMBECK: Right. 22 MR. SHERON: And then we still got the IOU on the 23 containment sump issue, with regard to your -- I think that 24 was your action, actually. 25 MR. BAILEY: On the GDC-4 issue and whether we wanted to ask for a rule change, that's in our court, to come back and make a proposal, if that's what we think we want. MR. SHERON: But, I think the other question was,

is that you had to comment that the NRC research program that does not adequately --

MR. BAILEY: Right.

MR. SHERON: -- address PWR to regeneration.

MR. BAILEY: Right.

 $$\operatorname{MR}.$ DEMBECK: And I think Rob said he was going to research that.

MR. JACOBS: That's in writing already.

MR. BLOOM: Right. So, Rob said he had to look at your letter and see how to respond to that. So, he had to go Research about getting a copy of that letter.

MR. DRAKE: We do have an action to get back to you on the license renewal topical reports.

MR. SAM COLLINS: Right.

MR. LOUNSBURY: I did talk to John Craig. I have been following this for the WOG, and one of the concerns that I have, and I've expressed this to John, was not only did the 105.41, the WCAP, there's a lot of other issues out there relating to station blackout, plant specific commitments, and other regulations that was waiting for this thing to close. The question that I posed is, like, how are you going to make sure that you're going to close the loop on all of these other things that were linked to this closure? They're not really sure what is really linked to that closure. I mean, just -- you follow what I'm saying? Just closing GSI-23 is that you've got them off the books. There's a lot of commitments and a lot of regulations out there waiting for this thing to close. I don't think they have a very good accountability about what's involved after

the close.

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MR. BLOOM: Are you talking about other --

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MR. LOUNSBURY: No, I'm not talking about -- I'm

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commitments that were waiting for GSI-23 closure, before

talking about other regulations, other plant specific

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they do things in station blackouts, etc.

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MR. TIM COLLINS: Station blackout is explicitly

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addressed in the GSA-23 closure. Now, as far as other commitments, I don't know if there are other generic --

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there are other specific regulations that have a hook on

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GSI-23. Station blackout clearly had a hook on it, you

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know. But, I don't know of other regulations, as a whole,

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that have a hook on GSI-23.

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MR. SHERON: Are you -- let me ask a question:

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are you familiar with any of these?

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MR. LOUNSBURY: The ones that I was -- obviously,

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the station blackout. The other one was plant -- there may be plant specific commitments that were waiting for GSI-23

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closure; that they had to take some sort of action or not

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action. And I'm not aware of any others, but I just really

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ask the questions.

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MR. SHERON: But the closure of 23, okay,

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basically says there is no plant specific actions or generic

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action. I mean, we already said there was no generic action

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required. The closure, basically, says there is no plant

specific action that is being implemented, at this time,

based on the closure. So, I mean, from the standpoint that

there are some plants that have, you know, an open item that

says I've got to do something depending upon, they don't

have to do anything. That's what I would -- that's how I would interpret it. Don't call us; we'll call you.

MR. LOUNSBURY: But the point being is that there were a lot of things that they -- this is early on in the discussion, back in July, we started -- we were approached by the NRC about helping them close GSI-23. There were certain things that surfaced that was more linked to this, than just closing GSI-23.

MR. SHERON: But part of the closure, though, there's a follow-up action plan after the generic issue is closed, but the Office of Research is continuing to do some plant specific studies. Because, as part of the closure, they had done some clarification of risk-related and some other sequences, aside from station blackout --

MR. LOUNSBURY: Right.

MR. SHERON: -- loss of component cooling water. And as a result of those analyses, the risks that they were calculating were high enough to consider that we needed to look at maybe some plant specific situations, to see if there was a need for action. But, there is no specific actions called out with the closeout of GSI-23, other than to pursue some plant specific studies.

MR. TIM COLLINS: Right. Well, related with GSI-23 closures is also GSI-9 and GSI-65.

 $$\operatorname{MR}.$ SHERON: Okay. I've drawn a blank on what 9 and 65 do.

 $$\operatorname{MR}.$$ TIM COLLINS: Sixty-five specifically is the component cooling water.

MR. SHERON: Okay. Component cooling water, there

are follow up studies being done on component cooling water, as far as -- the generic 23 is being closed and there's some specific plans, which will be analysis for plant specific vulnerabilities, relative to component cooling water. Okay, so that's 65 -- that was 65 or 90.

Okay. And what is nine?

 $$\operatorname{MR}.$$ TIM COLLINS: I can't remember off the top of $$\operatorname{my}$$ head.

MR. LIBERATORI: I think the individual utilities could deal with that.

MR. SAM COLLINS: I think what we may need to do a sweep of the WISP system, to see if there's any pending actions. But, clearly, I think in the way we disposition, too, once we get through ACRS comments and all. As Brian indicated, we'll send a message of whether we have further expectations for plant specific actions. So, we just need to take it under advisement on how we communicate.

MR. BAILEY: Sam, going back to the action item for the license renewal topicals, we have an action to -- after our meeting next week, to get to you with the dates we need. But, I think as a joint action, we need to finalize firm dates for issuing those topicals together.

MR. SAM COLLINS: I agree with that. Yeah, I think that's predicated on the needs for Turkey Point. But, there may be a specific meeting between the driver, which I think is going to be Turkey Point in this case, and the license renewal staff to go over the schedule and then we'll adjust that.

We had -- we just talked about the WCAP on the SER

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1	and the WCAP on RCPs, containment sump, risk-informed
2	approach guidance. I think we talked through that, right?
3	MR. TIM COLLINS: Right.
4	MR. SAM COLLINS: All right. LOCA analysis, I
5	think we're looking at a meeting early 2000 to review the
6	status. Is that what I heard?
7	MR. BAILEY: Yes.
8	MR. SAM COLLINS: The next action: AOV industry
9	initiative, I think we talked about industry initiative
10	versus commitment on that. And is that tied up in the
11	how you take credit for industry initiatives? Are we that
12	far along yet, do you know?
13	MR. SHERON: For some reason, this I thought
14	the AOV was strictly an industry initiative. I mean, we
15	didn't have this was not something that I think the NRC
16	
17	MR. BAILEY: Well, from our perspective,
18	initially, the NRC was looking at or thinking it may be a
19	generic issue.
20	MR. SHERON: Well, that was the AEOD studies on
21	it.
22	MR. BAILEY: So, we took the initiative to try to
23	get out in front of that.
24	MR. SAM COLLINS: Right. And then there was the
25	guidance that came through NEI, that NEI was going to give
	to the industry and INPO weighed in there a little bit. We
A	indicated that we had comments on that guidance.
N R:	MR. SHERON: We sent those comments out.
LI	MR. SAM COLLINS: Right. And so now, we need to

get with Tom Scarborough and understand how we're going to reconcile the industry initiative versus the NRC comments. And are we still comfortable with the industry just proceeding with their initiative? That, I think, is the issue I took.

MR. SHERON: Yeah.

MR. SAM COLLINS: Okay. And we talked about the additional workshop on voluntary industry initiatives.

MR. DRAKE: I guess the understanding is -- the term "industry initiatives," in your context of voluntary versus how we're using it, we don't -- I mean, the AOV program document is a guidance document to our members, to use as they see fit. It's not a voluntary initiative that we're saying to the industry, we're doing this. We provided them a reference document to use as they see fit.

MR. SAM COLLINS: Right.

MR. DRAKE: So, we don't see it falling into how -- into your voluntary initiative bin, at least from our perspective. You have to put it in that bin.

MR. SAM COLLINS: Well, I understand and your point is correct from where you sit. From where we sit, we say, what is the industry doing. Well, if they're following Westinghouse Owners Group guidance or INPO guidance -- there's a lot of ways to get to the means to an end --- then the staff has to understand that that guidance document that's being used, whether it's an Owners Groups document nor not, provides sufficient basis for the staff not to take generic action. That's kind of how they cross over I guess. Is that right, Brian?

1	MR. SHERON: Uh-huh.
2	MR. SAM COLLINS: As I see it.
3	MR. BAILEY: Yeah, that was kind of the comment I
4	made early on, is what were your expectations on what you
5	thought the industry was doing with the document versus what
6	we're doing or not doing.
7	MR. SAM COLLINS: Right.
8	MR. BAILEY: That, I think, is the open end item
9	right here on AOVs, because I'm not sure we've gone far
10	enough to for you to decide to know exactly where we're
11	going yet.
12	MR. SAM COLLINS: Right. Okay. Any other topics?
13	Lou? Jack?
14	[No response.]
15	MR. SAM COLLINS: All right. Did we get to where
16	we needed to go?
17	MR. BAILEY: Yeah, that was a good discussion on a
18	number of items.
19	MR. SAM COLLINS: Okay. Very good. That closes
20	the meeting, then?
21	MR. BLOOM: That closes the meeting. Thank you,
22	very much.
23	MR. SAM COLLINS: Thank you.
24	[Whereupon, at 11:21 a.m., the meeting was
25	concluded.]